CITY OF CALGARY PARKS DEPARTMENT

ANNUAL REPORT 1937

I N D E X

ST. GEORGE'S ISLAND ZOO: (Cont'd)

DETAILS OF LIFE SIZE DINOSAUR MODELS IN ST. GEORGE'S ISLAND PARK AS AT DECEMBER 31, 1937.

Name and number of specimens	Known range	Geological time	Food habits	Weight	Dimensions Length	Dimensions Height
1 Brontosaurus	Wyoming, U.S.A.	Jurassic	herbivorous	120 tons	107 ft.	34 ft.
2 Ceratasaurus	Colorado, U.S.A.	"	carnivorous	8 tons	30 ft.	14 ft.
1 Chasmosaurus	Plains of W. Canada	Cretaceous	herbivorous	3½ tons	20 ft.	6 ft.
2 Protoceratops	Mongolia	"	"	1000 lbs.	12 ft.	2½ ft.
2 Demetrodon	Southern U.S.A.	Permian	omnivorous	800 lbs.	9 ft.	5 ft.
2 Casea	North America	"	"	800 lbs.	8 ft.	2 ft.
X1 Stegosaurus	Plains of W. Canada	Jurassic	herbivorous	2 tons	24 ft.	8 ft.
X1 Palaeoscincus	" " " "	Cretaceous	omnivorous	1000 lbs.	16 ft.	4 ft.
2 Hypsilophodon	" " " "	Permian	"	200 lbs.	5 ft.	2 ft.
2 Pterodactyl	Central Europe	Jurassic	"	30 lbs.	2 ft.	18 in.
2 Eohippus	North America	Eocene	herbivorous	100 lbs.	2 ft.	15 in.
1 Messohippus	" "	"	"	160 lbs.	3 ft.	18 in.
1 Nasosaurus	Southern U.S.A.	Permian	carnivorous	1000 lbs.	9 ft.	5 ft.

Weights are approximately those of the life-sized models in Park. It is estimated actual living specimens would have weighed approximately 2/3 of these weights. Materials used in construction of the above models consisted of ¼ inch and ½ inch iron rod, metal lath, wire, boulders and concrete.

X To be completed in 1938.

Zoo expenditure 1937 $2,167.84. Relief labour 3,360 hours.

12

METHOD OF ASSEMBLING AND CONSTRUCTION OF DINOSAUR MODELS

On finding the remains of a specimen it is carefully uncovered and at once re-covered with Plaster of Paris to exclude air. Taken to Ottawa, the parts are assembled; missing bones are either replaced with bones of the same type found elsewhere, or "dummy" bones are substituted, these being painted white to distinguish them from the real bones. From these, models are made, usually no more than 2 ft. long, but of course made perfectly to scale. It was from such models as these that the life-sized models in the Calgary Park were made.

Method of Construction

The first job was to decide on position and place pegs where the feet and tail were to come, also the point on the ground immediately below where the head would be. Concrete footings to support the feet were then put in. Immersed in these footings were 1", ¾" and ½" reinforcing rods, these were bent to conform to the approximate outline, and other rods wired on to them. Metal lath was wired around the rods, the interior filled with cement and small rocks, and the exterior cemented over. Finally the muscles, etc. were created, the rocks and concrete being replaced by cement, a cement wash, and, finally, appropriate painting completed the job. The legs, head, etc. were made as described, i.e., solid, but in large specimens the main body is hollow to the extent that metal lath is placed double and kept apart with "spreaders" of wood. The space between is then packed with concrete, the inside left hollow and the outside finished as previously described.

The term "appropriate painting" possibly needs explanation. Scientists have not been able to discover, to date, what the colour or colours of these creatures were. The colours used on the models erected on St. George's Island are as near as possible those of existing reptiles and amphibia and such present day creatures as might possibly come nearest in relationship to these prehistoric animals.